

F. No. 283/41/2024-GRID SOLAR
भारत सरकार / Government of India
नवीन और नवीकरणीय ऊर्जा मंत्रालय / Ministry of New & Renewable Energy
ग्रिड सौर ऊर्जा प्रभाग / Grid Solar Power Division

Atal Akshay Urja Bhawan,
Lodhi Road, New Delhi – 110003.
Dated: 28th October, 2024

OFFICE MEMORANDUM

Sub: Updation of List I (Manufacturers and Models of Solar PV Modules) of ALMM Order, 2019 – Reg.

- Ref:** (i) MNRE's O.M. No. 283/54/2018-GRID SOLAR–Part(1) dated 10.03.2021
(ii) MNRE's O.M. No. 283/22/2023-GRID SOLAR/Pt dated 10.05.2023;
(iii) MNRE's O.M. No. 283/22/2023-GRID SOLAR/Pt dated 22.03.2024;

Reference is invited to this Ministry's O.M.s of even no. dated 10.03.2021, regarding implementation of Approved Models and Manufacturers of Solar Photovoltaic Modules (Requirement for Compulsory Registration) Order, 2019 and publishing List – I (Manufacturers and Models of Solar PV Modules) of ALMM Order, 2019.

2. This Ministry vide its O.M. No. 283/22/2023-GRID SOLAR/Pt dated 10.05.2023 and O.M. of even no. dated 22.03.2024 inter-alia directed that only such models of Solar PV Module Manufacturers will be enlisted under ALMM, which comply with the BIS Standards and are having the following minimum module efficiency:

Category	Application/ Use	Minimum Module Efficiency requirement for crystalline-Silicon technology based Solar PV Modules	Minimum Module Efficiency requirement for Cadmium Telluride Thin Film technology based Solar PV Modules
Category I	Utility / Grid Scale Power Plants	20.0%	19.00%
Category II	Rooftop and Solar Pumping	19.5%	18.50%
Category III	Solar Lighting	19.0%	18.00%

3. Post the O.M. dated 10.05.2023 and subsequent O.M. dated 22.03.2024, only such models of Solar PV Modules have been considered for enlistment under ALMM List-I, whose module efficiency is meeting the eligibility criteria as mentioned in table at para-2 above.


4. The List – I (Manufacturers and Models of Solar PV Modules) of ALMM Order, 2019 was last updated on 14.10.2024.

5. The List – I (Manufacturers and Models of Solar PV Modules) of ALMM Order, 2019 is hereby further revised and the Revision-XXX of same is enclosed at Annexure-I. The details of provisional enlistments granted by MNRE in ALMM List-I are at pages after Annexure-I.

6. The ALMM enlistment validity is subject to valid BIS Registration; else deemed to be delisted.

7. The details of Registration No. (R. No.) which has been allotted by BIS is mentioned against each manufacturer / manufacturing unit enlisted in ALMM and further details related to BIS certification like validity, models included, etc. may be checked from BIS website by using the following link:
https://www.crsbis.in/BIS/Lims_registration.do?hmode=getLimsData

8. This issues with the approval of competent authority.



(Sanjay G. Karndhar)
Scientist-E
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Encl: as above

To: All Concerned

Copy to: Director (Technical), NIC, MNRE for uploading this document on MNRE's website

List of Manufacturers and Models of Solar PV Modules Enlisted under ALMM Order (As on 28.10.2024)

S. No.	Name of the Manufacturer	Location of Manufacturing Facility	BIS Registration No.	Enlisted Capacity (MWs / Year)	S. No.	Type of Module	Applied Model	Enlisted Models	Module Efficiency (%)	No. of Cells in Module	System Voltage (in Volt)	Validity	
												From	To (subject to valid BIS Registration; else deemed to be delisted)
1	Emmvee Photovoltaic Power Pvt. Ltd.	#13/1, International Airport Road (Bellary Road), Bettahalsuru Post, Bengaluru-562157, Karnataka	R-62001074	512	i	Mono C-Si PERC Modules	E390M72 (390 Wp)	E385M72 E390M72 E395M72	19.20 19.45 19.70	72 (Full Cells)	1500	10.03.2023	09.03.2027
					ii	Mono C-Si PERC Modules	E325M60 (325 Wp)	E320M60 E325M60 E330M60	19.04 19.34 19.64	60 (Full Cells)	1500	10.03.2023	09.03.2027
2	M/s Sova Solar Ltd.	Layout Plot No: 25, E.P.I.P, Banskopa, Durgapur 713212, West Bengal, India.	R-51000590	532	i	Mono C-Si PERC Modules	SS535144HCMP (535Wp)	SS520144HCMP	20.16	144 (Half-Cut Cells)	1500	10.03.2023	09.03.2027
								SS525144HCMP	20.35				
								SS530144HCMP	20.54				
								SS535144HCMP	20.74				
								SS540144HCMP	20.93				
								SS545144HCMP	21.13				
					ii	Mono C-Si PERC Bifacial Modules	SS535144HCBP (535Wp)	SS550144HCMP	21.32				
								SS555144HCMP	21.51				
								SS520144HCBP	20.16				
								SS525144HCBP	20.35				
								SS530144HCBP	20.54				
								SS535144HCBP	20.74				
iii	Bifacial Mono c-Si PERC Modules (Glass to Transparent Backsheet)	SS535144HCMP (535Wp)	SS540144HCBP	20.93									
			SS545144HCBP	21.13									
			SS550144HCBP	21.32									
			SS555144HCBP	21.51									
			SS520144HCMP	20.16									
			SS525144HCMP	20.35									
3	M/s Solex Energy Ltd	Plot No. 131/A Phase-1, G.I.D.C, Vitthal Udyognagar, Anand, Gujarat	R-72002577	21	i	Mono C-Si PERC Modules	SESM24375 (375 Wp)	SESM24370	19.04	72 (Full Cells)	1000	10.03.2023	09.03.2027
								SESM24375	19.30				
								SESM24380	19.55				
ii	Mono C-Si PERC Modules	SES20CM120W320 (320 Wp)	SES20CM120W320	19.21	120 (Half Cells)	1000	10.03.2023	09.03.2027					
			SES24CM144W375	19.01	144 (Half Cells)	1000	10.03.2023	09.03.2027					
SES24CM144W380	19.30												
SES24CM144W385	19.51												
4	Saatvik Green Energy Pvt. Ltd.	Village Dubli, Tehshil- Barara, Dist- Ambala -133101, Haryana	R-91003670	566	i	Mono C-Si PERC Modules	SGE 190-36M (190 Wp)	SGE 190-36M	19.11	36 (Full Cells)	1000	10.03.2023	09.03.2027
								ii	Mono C-Si PERC Modules	SGE 255-48M (255 Wp)	SGE 255-48M	19.37	48 (Full Cells)
					iii	Mono C-Si PERC Modules	SGE 285-54M (285 Wp)	SGE 280-54M	19.15	54 (Full Cells)	1000	10.03.2023	09.03.2027
								SGE 285-54M	19.49				
					iv	Mono C-Si PERC Modules	SGE 315-60M (315 Wp)	SGE 310-60M	19.08	60 (Full Cells)	1500	10.03.2023	09.03.2027
								SGE 315-60M	19.41				
					v	Mono C-Si PERC Modules	SGE 375-72M (375 Wp)	SGE 370-72M	19.09	72 (Full Cells)	1500	10.03.2023	09.03.2027
								SGE 375-72M	19.35				
					vi	Mono C-Si PERC Modules	SGE570-156MHC, (570 Wp)	SGE 380-72M	19.61	156 (Half Cut Cells)	1500	10.03.2023	09.03.2027
								SGE555-156MHC	19.78				
								SGE560-156MHC	19.96				
								SGE565-156MHC	20.14				
								SGE570-156MHC	20.32				
								SGE575-156MHC	20.50				
vii	Mono C-Si PERC Modules	SGE530-144MHC, (530 Wp)	SGE580-156MHC	20.67	144 (Half Cut Cells)	1500	10.03.2023	09.03.2027					
			SGE585-156MHC	20.85									
			SGE590-156MHC	21.03									
			SGE520-144MHC	20.13									
			SGE525-144MHC	20.32									
			SGE530-144MHC	20.52									
			SGE535-144MHC	20.70									
			SGE540-144MHC	20.90									
SGE545-144MHC	21.10												
SGE550-144MHC	21.29												
SGE470-132MHC	19.78												

S. No.	Name of the Manufacturer	Location of Manufacturing Facility	BIS Registration No.	Enlisted Capacity (MWs / Year)	S. No.	Type of Module	Applied Model	Enlisted Models	Module Efficiency (%)	No. of Cells in Module	System Voltage (in Volt)	Validity	
												From	To (subject to valid BIS Registration; else deemed to be delisted)
					viii	Mono C-Si PERC Modules	SGE485-132MHC, (485 Wp)	SGE475-132MHC	20.01	132 (Half Cut Cells)	1500	10.03.2023	09.03.2027
								SGE480-132MHC	20.23				
								SGE485-132MHC	20.41				
								SGE490-132MHC	20.63				
								SGE495-132MHC	20.84				
								SGE500-132MHC	21.05				
					ix	Mono C-Si PERC Modules	SGE440-120MHC, (440 Wp)	SGE420-120MHC	19.37	120 (Half Cut Cells)	1500	10.03.2023	09.03.2027
								SGE425-120MHC	19.60				
								SGE430-120MHC	19.83				
								SGE435-120MHC	20.06				
								SGE440-120MHC	20.29				
								SGE445-120MHC	20.52				
					x	Mono C-Si PERC Modules	SGE395-108MHC, (395 Wp)	SGE450-120MHC	20.76	108 (Half Cut Cells)	1500	10.03.2023	09.03.2027
								SGE455-120MHC	20.99				
								SGE380-108MHC	19.44				
								SGE385-108MHC	19.69				
								SGE390-108MHC	19.95				
								SGE395-108MHC	20.20				
					xi	Mono C-Si PERC Modules	SGE 395-72M, (395 Wp)	SGE400-108MHC	20.46	72 (Full Cell)	1500	10.03.2023	09.03.2027
								SGE405-108MHC	20.71				
								SGE410-108MHC	20.98				
								SGE 385-72M	19.22				
					xii	Bifacial Mono c-Si PERC Modules (Glass to Transparent Backsheet)	SGE535-144MBHC (535 Wp)	SGE 390-72M	19.47	144 (Half Cut Cells)	1500	10.03.2023	09.03.2027
								SGE 395-72M	19.72				
SGE 400-72M	19.97												
SGE525-144MBHC	20.32												
SGE530-144MBHC	20.52												
SGE535-144MBHC	20.71												
SGE540-144MBHC	20.90												
5	Navitas Green Solutions Pvt. Ltd.	Plot No. B-20/3, Road No. 13, 14, Palsana-Baleswar Rd, Hoziwala Industrial Estate, Sachin, Surat-394230, Gujarat	R-72003140	250	i	Mono C-Si PERC Modules	NSM375 (375 Wp)	SGE545-144MBHC	21.10	72 (Full Cells)	1500	10.03.2023	09.03.2027
								NSM370	19.07				
								NSM375	19.33				
					ii	Mono C-Si PERC Modules	NSM320-60 (320 Wp)	NSM380	19.58	60 (Full Cells)	1500	10.03.2023	09.03.2027
								NSM310-60	19.09				
								NSM315-60	19.40				
								NSM320-60	19.71				
								NSM325-60	20.02				
								NSM330-60	20.33				
					iii	Mono C-Si PERC Modules	NSM350-66 (350 Wp)	NSM340-66	19.03	66 (Full Cells)	1500	10.03.2023	09.03.2027
								NSM345-66	19.31				
								NSM350-66	19.59				
					iv	Mono PERC C-Si Module	NSM580-156 (580 Wp)	NSM355-66	19.87	156 (Half Cut Cells)	1500	10.03.2023	09.03.2027
								NSM570-156	20.39				
								NSM575-156	20.57				
								NSM580-156	20.74				
					v	Mono PERC C-Si Module	NSM540-144 (540 Wp)	NSM585-156	20.92	144 (Half Cut Cells)	1500	10.03.2023	09.03.2027
								NSM525-144	20.32				
								NSM530-144	20.51				
								NSM535-144	20.71				
								NSM540-144	20.90				
								NSM545-144	21.09				
					vi	Mono PERC C-Si Module	NSM500-132 (500 Wp)	NSM555-144	21.48	132 (Half Cut Cells)	1500	10.03.2023	09.03.2027
								NSM550-144	21.29				
NSM560-144	21.67												
NSM480-132	20.21												
NSM485-132	20.42												
NSM490-132	20.64												
vii	Mono PERC C-Si Module	NSM445-120 (445 Wp)	NSM495-132	20.85	120 (Half Cut Cells)	1500	10.03.2023	09.03.2027					
			NSM500-132	21.06									
			NSM435-120	20.09									
			NSM440-120	20.33									
			NSM445-120	20.56									
			NSM450-120	20.79									
viii	Mono PERC C-Si Module	NSM400-108 (400 Wp)	NSM455-120	21.02	108 (Half Cut Cells)	1500	10.03.2023	09.03.2027					
			NSM390-108	19.96									
			NSM395-108	20.21									
			NSM400-108	20.47									
			NSM405-108	20.72									
			NSM410-108	20.98									

S. No.	Name of the Manufacturer	Location of Manufacturing Facility	BIS Registration No.	Enlisted Capacity (MWs / Year)	S. No.	Type of Module	Applied Model	Enlisted Models	Module Efficiency (%)	No. of Cells in Module	System Voltage (in Volt)	Validity						
												From	To (subject to valid BIS Registration; else deemed to be delisted)					
					ix	Mono PERC C-Si Module	NSM360-96 (360 Wp)	NSM350-96	20.06	96 (Half Cut Cells)	1500	10.03.2023	09.03.2027					
								NSM355-96	20.35									
								NSM360-96	20.64									
								NSM365-96	20.92									
					x	Mono PERC C-Si Module	NSM270-72 (270 Wp)	NSM260-72	19.62	72 (Half Cut Cells)	1500	10.03.2023	09.03.2027					
								NSM265-72	20.00									
								NSM270-72	20.38									
								NSM275-72	20.76									
					xi	Mono PERC C-Si Module	NSM470-156 (470 Wp)	NSM460-156	19.65	156 (Half Cut Cells)	1500	10.03.2023	09.03.2027					
								NSM465-156	19.86									
								NSM470-156	20.07									
								NSM475-156	20.29									
					xii	Mono PERC C-Si Module	NSM450-144 (450 Wp)	NSM480-156	20.50	144 (Half Cut Cells)	1500	10.03.2023	09.03.2027					
								NSM485-156	20.72									
								NSM435-144	20.08									
								NSM440-144	20.32									
					xiii	Mono PERC C-Si Module	NSM405-132 (405 Wp)	NSM445-144	20.78	132 (Half Cut Cells)	1500	10.03.2023	09.03.2027					
								NSM450-144	20.55									
								NSM455-144	21.01									
								NSM460-144	21.64									
					xiv	Mono PERC C-Si Module	NSM370-120 (370 Wp)	NSM465-144	21.47	120 (Half Cut Cells)	1500	10.03.2023	09.03.2027					
								NSM395-132	19.85									
								NSM400-132	20.10									
								NSM405-132	20.35									
					xv	Mono PERC C-Si Module	NSM330-108 (330 Wp)	NSM410-132	20.60	108 (Half Cut Cells)	1500	10.03.2023	09.03.2027					
								NSM415-132	20.85									
								NSM360-120	19.84									
								NSM365-120	20.11									
					xvi	Mono PERC C-Si Module	NSM290-96 (290 Wp)	NSM370-120	20.39	96 (Half Cut Cells)	1500	10.03.2023	09.03.2027					
								NSM375-120	20.66									
								NSM320-108	19.52									
								NSM325-108	19.82									
					xvii	Mono PERC C-Si Module	NSM220-72 (220 Wp)	NSM330-108	20.13	72 (Half Cut Cells)	1500	10.03.2023	09.03.2027					
								NSM335-108	20.43									
								NSM340-108	20.74									
								NSM285-96	19.47									
					xviii	Mono PERC C-Si Module	NSM395 (395 Wp)	NSM290-96	19.81	72 (Full Cells)	1500	10.03.2023	09.03.2027					
								NSM295-96	20.15									
								NSM300-96	20.49									
								NSM215-72	19.32									
					6	Jakson Engineers Ltd.	Plot No-25, Ecotech-III, Udyog Kendra, Greater NOIDA-201306, Gautam Budha Nagar, Uttar Pradesh, India.	R-93005959	1162	i	Mono C-Si PERC Modules	JH-440M, (440Wp)	NSM220-72	19.77	120 (Half-Cut Cells)	1500	17.08.2023	16.08.2027
													NSM225-72	20.22				
													NSM385	19.40				
													NSM390	19.65				
													NSM395	19.90				
													NSM400	20.15				
													JH-420M	19.26				
													JH-425M	19.49				
JH-430M	19.71																	
JH-435M	19.94																	
JH-440M	20.17																	
JH-445M	20.40																	
JH-450M	20.63																	
JH-455M	20.86																	
JH-460M	21.09																	
JH-470M	19.66																	
JH-475M	19.87																	
JH-480M	20.08																	
JH-485M	20.29																	
JH-490M	20.50																	
JH-495M	20.71																	
JH-500M	20.92																	
JH-505M	21.13																	
JH-510M	21.34																	
JH-515M	19.85																	
JH-520M	20.04																	
JH-525M	20.23																	
JH-530M	20.43																	
JH-535M	20.62																	
JH-540M	20.81																	
JH-545M	21.00																	
ii	Mono C-Si PERC Modules	JH-490M, (490Wp)	JH-535M	20.62	132 (Half-Cut Cells)	1500	17.08.2023	16.08.2027										
			JH-540M	20.81														
			JH-545M	21.00														
			JH-520M	20.04														
			JH-525M	20.23														
			JH-530M	20.43														
			JH-535M	20.62														
			JH-540M	20.81														
			JH-545M	21.00														
			JH-520M	20.04														
			JH-525M	20.23														
			JH-530M	20.43														
JH-535M	20.62																	
JH-540M	20.81																	
JH-545M	21.00																	
iii	Mono C-Si PERC Modules	JH-535M, (535Wp)	JH-535M	20.62	144 (Half-Cut Cells)	1500	17.08.2023	16.08.2027										
			JH-540M	20.81														
			JH-545M	21.00														
			JH-520M	20.04														
			JH-525M	20.23														
			JH-530M	20.43														
			JH-535M	20.62														
			JH-540M	20.81														
			JH-545M	21.00														
			JH-520M	20.04														
			JH-525M	20.23														
			JH-530M	20.43														
JH-535M	20.62																	
JH-540M	20.81																	
JH-545M	21.00																	